

ERRATA

Vrijheid et al. [Environ Health Perspect 119:598–606 (2011)] have reported errors in their paper, which resulted from errors in formulas applied to convert risk estimates for continuous exposure from reviewed studies. These errors affect the summary values in their Abstract, Figure 1, Tables 2 and 3, and Supplemental Material, Table 2A–E.

Data for Dadvand (2011a), Dolk et al. (2010), Strickland et al. (2009) and Marshall et al. (2010) have been corrected in Supplemental Material, Table 2A–E (pp. 5–14; doi:10.1289/ehp.1002946). Because several summary values were incorrect in Tables 2 and 3, the corrected tables are presented here. In addition, in Figure 1C (PM₁₀ and ASDs), “Dolk et al. (2009)” should be “Hansen et al. (2009).” Figure 1 has been corrected online.

These errors also affect the meta-analysis estimates in the abstract (under “Data synthesis”), which have been corrected here:

In meta-analyses, nitrogen dioxide (NO₂) and sulfur dioxide (SO₂) exposures were related to increases in risk of coarctation of the aorta [odds ratio (OR) per 10 ppb NO₂ = 1.20; 95% confidence interval (CI), 1.00–1.44; OR per 1 ppb SO₂ = 1.04; 95% CI, 1.00–1.08] and tetralogy of Fallot (OR per 10 ppb NO₂ = 1.25; 95% CI, 1.02–1.51; OR per 1 ppb SO₂ = 1.04; 95% CI, 1.00–1.08), and PM₁₀ (particulate matter ≤ 10 µm) exposure was related to an increased risk of atrial septal defects (OR per 10 µg/m³ = 1.14; 95% CI, 1.01–1.28).

None of these corrections affect the statistical significance of the pooled estimates or the conclusions of the paper. The authors apologize for the errors.

The January 2011 Focus article erroneously stated the Qori Kalis glacier retreated 18 feet per year in the last 15 years (Schmidt CW. 2011. Out of equilibrium? The world's changing ice cover. Environ Health Perspect 119:A20–A28; <http://dx.doi.org/10.1289/ehp.119-a20>). This glacier has actually retreated an average of 180 feet per year in the last 15 years. EHP regrets the error.

Table 2. Summary of meta-analysis of studies on air pollutant exposures and cardiac anomalies.

Pollutant and anomaly combination	Studies included ^a	Total number of cases ^b	Continuous exposure ^c		High versus low exposure	
			Heterogeneity <i>p</i> -value	Summary OR (95% CI) ^d	Heterogeneity <i>p</i> -value	Summary OR (95% CI) ^d
CO						
				per 1 ppm		
ASDs	1, 2, 5, 6, 9	1,337	0.10	0.87 (0.72–1.05)	0.17	0.86 (0.75–0.99)
VSDs	1, 2, 5, 6, 9	3,710	< 0.001	1.14 (0.66–1.98)	< 0.001	1.18 (0.82–1.69)
Conotruncal defects	1, 2, 5, 6	1,156	0.02	0.95 (0.57–1.58)	0.01	0.95 (0.62–1.44)
NO ₂						
				per 10 ppb		
ASDs	2, 5, 6, 9	952	0.81	1.10 (0.91–1.33)	0.28	1.07 (0.90–1.26)
VSDs	2, 5, 6, 9	3,460	0.002	1.12 (0.87–1.44)	0.03	0.92 (0.77–1.12)
Coarctation of the aorta	2, 5, 7, 9	756	0.31	1.20 (1.00–1.44)	0.13	1.04 (0.86–1.26)
Tetralogy of Fallot	2, 5, 7, 9	704	0.23	1.25 (1.02–1.51)	0.06	1.04 (0.70–1.55)
O ₃						
				per 10 ppb		
ASDs	1, 2, 5, 6, 9	1,307	0.08	1.10 (0.92–1.32)	0.31	0.99 (0.83–1.19)
VSDs	1, 2, 5, 6, 9	3,557	0.04	0.94 (0.82–1.08)	0.02	0.93 (0.73–1.18)
Conotruncal defects	1, 2, 5, 6	1,164	0.64	1.07 (0.96–1.19)	0.45	1.13 (0.89–1.42)
PM ₁₀						
				per 10 µg/m ³		
ASDs	2, 5, 6, 9	951	0.10	1.14 (1.01–1.28)	0.02	1.23 (0.91–1.67)
VSDs	2, 5, 6, 9	3,410	0.12	1.03 (0.96–1.10)	0.70	0.93 (0.84–1.02)
Coarctation of the aorta	2, 5, 7, 9	761	0.02	1.10 (0.88–1.39)	0.48	1.00 (0.79–1.26)
Tetralogy of Fallot	2, 5, 7, 9	546	0.37	1.00 (0.87–1.15)	0.02	0.91 (0.53–1.56)
SO ₂						
				per 1 ppb		
ASDs	2, 5, 6, 9	909	0.01	0.96 (0.86–1.07)	0.01	0.85 (0.57–1.28)
	2, 5, 6, 10 ^e	914	0.01	0.97 (0.87–1.08)	0.02	0.92 (0.63–1.33)
VSDs	2, 5, 6, 9	3,217	< 0.001	1.03 (0.97–1.11)	< 0.001	0.96 (0.63–1.46)
	2, 5, 6, 10 ^e	3,056	< 0.001	1.01 (0.94–1.07)	< 0.001	1.08 (0.81–1.44)
Coarctation of the aorta	2, 4, 5, 6 ^f				< 0.001	1.05 (0.76–1.46)
	2, 5, 7, 9	682	0.71	1.04 (1.00–1.08)	0.29	1.06 (0.89–1.27)
	2, 5, 7, 10 ^e	687	0.02	1.01 (0.94–1.07)	0.01	0.89 (0.61–1.32)
	2, 4, 5, 7 ^f				0.95	1.10 (0.92–1.31)
Tetralogy of Fallot	2, 5, 7, 9	655	0.10	1.04 (1.00–1.08)	< 0.001	0.80 (0.45–1.41)
	2, 5, 7, 10 ^e	670	0.05	1.03 (0.97–1.09)	0.06	1.02 (0.75–1.39)
	2, 4, 5, 7				0.13	1.13 (0.93–1.36)

^aStudies included are different in each pollutant-anomaly meta-analysis depending on the data they published. References are as follows: 1, Ritz et al. (2002); 2, Gilboa et al. (2005); 3, Rankin et al. (2009); 4, Strickland et al. (2009); 5, Hansen et al. (2009); 6, Dolk et al. (2010); 7, Dadvand et al. (2011b); 8, Dadvand et al. (2011a). ^bNumber of cases included in the continuous exposure analysis. ^cConversion factors: CO, 1 ppb = 1.15 µg/m³; NO₂, 1 ppb = 1.88 µg/m³; O₃, 1 ppb = 1.96 µg/m³; SO₂, 1 ppb = 2.62 µg/m³. ^dWhen heterogeneity *p*-value is < 0.10, the OR from random effect model is shown; otherwise, the OR from the fixed-effects model is shown. ^eSensitivity analysis using Dadvand 2011a instead of Dadvand 2011b. ^fSensitivity analysis including Rankin 2009 instead of Dadvand 2011b.

Table 3. Summary of meta-analysis of studies on air pollutant exposures and orofacial clefts.

Pollutant and anomaly combination	Studies included ^a	Total number of cases ^b	Continuous exposure ^c		High versus low exposure	
			Heterogeneity <i>p</i> -value	Summary OR (95% CI) ^d	Heterogeneity <i>p</i> -value	Summary OR (95% CI) ^d
CO						
				per 1 ppm		
Cleft lip/palate ^e	1, 2, 3, 6, 8	1,498	0.03	0.89 (0.66–1.20)	0.002	0.99 (0.79–1.24)
Cleft palate	1, 2, 6, 8	697	0.009	0.68 (0.36–1.25)	0.06	0.78 (0.55–1.12)
NO ₂						
				per 10 ppb		
Cleft lip/palate	2, 6, 7, 8	1,423	0.43	1.00 (0.87–1.16)	0.25	1.06 (0.88–1.28)
Cleft palate	2, 6, 7, 8	809	0.12	0.91 (0.76–1.08)	0.23	0.79 (0.62–1.01)
O ₃						
				per 10 ppb		
Cleft lip/palate	1, 2, 3, 6, 8	1,950	0.20	1.10 (0.99–1.21)	0.22	1.06 (0.96–1.17)
Cleft palate	1, 2, 6, 8	702	0.79	0.99 (0.83–1.18)	0.42	1.00 (0.79–1.26)
PM ₁₀						
				per 10 µg/m ³		
Cleft lip/palate	2, 3, 6, 7, 8	2,072	0.70	1.01 (0.96–1.06)	0.45	1.02 (0.94–1.11)
Cleft palate	2, 6, 7, 8	803	0.008	0.91 (0.58–1.41)	0.15	0.86 (0.70–1.07)
SO ₂						
				per 1 ppb		
Cleft lip/palate	2, 3, 6, 7, 8	1,976	0.06	0.99 (0.94–1.05)	0.01	1.06 (0.87–1.29)
	2, 3, 4, 6, 7, 8 ^f				0.02	1.06 (0.89–1.27)
Cleft palate	2, 6, 7, 8	764	0.35	1.03 (0.98–1.07)	0.17	0.94 (0.81–1.10)

^aReferences are as follows: 1, Ritz et al. (2002); 2, Gilboa et al. (2005); 3, Hwang and Jaakkola (2008); 4, Rankin et al. (2009); 5, Hansen et al. (2009); 6, Dolk et al. (2010); 7, Marshall et al. (2010). ^bNumber of cases included in the continuous exposure analysis. ^cConversion factors: CO, 1 ppb = 1.15 µg/m³; NO₂, 1 ppb = 1.88 µg/m³; O₃, 1 ppb = 1.96 µg/m³; SO₂, 1 ppb = 2.62 µg/m³. ^dWhen heterogeneity *p*-value is < 0.10 the OR from random effect model is shown; otherwise, the OR from the fixed-effect model is shown. ^eCleft lip with or without cleft palate. ^fSensitivity analysis including Rankin 2009 (no continuous exposure estimate available).